ELSEVIER

Forest Ecology and Management 171 (2002) 339–340

Forest Ecology and Management

www.elsevier.com/locate/foreco

Contents of *Forest Ecology and Management*, Volume 171

VOLUME 171, ISSUES 1–2 1 NOVEMBER 2002

Special Issue: Sustainability of Forest Soils

Preface 1

Role of nutrients and nutrient cycling processes in soil sustainability

Nutrient budgets for a rotation of a Douglas-fir plantation in the Beaujolais (France) based on a chronosequence study
J. Ranger, S. Allie, D. Gelhaye, B. Pollier, M.-P. Turpault and A. Granier (Champenoux, France) 3

Atmospheric deposition in oligotrophic *Quercus pyrenaica* forests: implications for forest nutrition
G. Moreno Marcos (Plasencia, Spain) and J.F. Gallardo Lancho (Salamanca, Spain) 17

Decomposition and nutrient release from leaf litter of *Eucalyptus globulus* grown under different water and nutrient regimes
C. Ribeiro (Coimbra, Portugal), M. Madeira (Lisbon, Portugal) and M.C. Araújo (Leirosa, Portugal) 31

Changes with age in the spatial distribution of roots of *Eucalyptus* clone in Congo. Impact on water and nutrient uptake
J.-P. Bouillet, J.-P. Laclau, M. Arnaud (Montpellier, France), A.T. M'Bou (Pointe-Noire, Congo), L. Saint-André and
C. Jourdan (Montpellier, France) 43

Soil Indicators

Is soil carbon a useful indicator of sustainable forest soil management?—a case study from native eucalypt forests of south-eastern Australia
J. Bauhus (Canberra, Australia), P.K. Khanna (Canberra-Kingston, Australia), P. Hopmans (Heidelberg, Australia) and
C. Weston (Creswick, Australia) 59

Changes in carbon stocks in *Eucalyptus globulus* Labill. plantations induced by different water and nutrient availability
M.V. Madeira, A. Fabião, J.S. Pereira (Lisbon, Portugal), M.C. Araújo (Leirosa, Portugal) and C. Ribeiro (Coimbra, Portugal) . 75

Influence of soil and organic residue management on biomass and biodiversity of understory vegetation in a *Eucalyptus globulus* Labill. plantation
A. Fabião, M.C. Martins, C. Cerveira, C. Santos, M. Lousã, M. Madeira and A. Correia (Lisboa, Portugal) 87

Understory vegetation as indicators of soil characteristics in northwest Spain
R. Zas and M. Alonso (Pontevedra, Spain) 101

Temporal changes in organic carbon of soils developed on volcanic andesitic deposits in Japan
K. Morisada, A. Imaya and K. Ono (Ibaraki, Japan) 113

Near infrared spectroscopy of forest soils to determine chemical and biological properties related to soil sustainability
B. Ludwig (Göttingen, Germany), P.K. Khanna (Kingston, Australia), J. Bauhus (Canberra,, Australia) and
P. Hopmans (Heidelberg, Australia) 121

Site factors

Site assessment for farm forestry in Australia and its relationship to scale, productivity and sustainability
P.J. Ryan (Kingston, Australia), R.J. Harper (Bentley, Australia), M. Laffan (Tasmania, Australia),
T.H. Booth (Kingston, Australia) and N.J. McKenzie (Canberra, Australia) 133

Forest site classification and evaluation: a South African perspective
J.H. Louw (George, South Africa) and M. Scholes (Wits, South Africa) 153

Productivity and humus status of forest soils in Estonia
R. Kõlli (Tartu, Estonia) 169

PII: S0378-1127(02)00514-5

Influence of edaphic factors and tree nutritive status on the productivity of *Pinus radiata* D. Don plantations in northwestern Spain
F. Sánchez-Rodríguez, R. Rodríguez-Soalleiro (Lugo, Spain), E. Español (Pontevedra, Spain), C.A. López and A. Merino (Lugo, Spain) 181

Soil management and amelioration practices
Development of soil organic matter under pine on quarry detritus of open-cast oil-shale mining
L. Reintam, E. Kaar and I. Rooma (Tartu, Estonia) 191
Soil treatments for improved timber production in *Pinus radiata* plantations in South Africa
J. Zwolinski, M. Johnston (Scottsville, South Africa) and H. Kotze (Sabie, South Africa) 199
The effects of slash management on nutrient cycling and tree growth in *Eucalyptus* plantations in the Congo
J. de Dieu Nzila (Pointe-Noire, Congo), J.-P. Bouillet, J.-P. Laclau (Montpellier, France) and J. Ranger (Champenoux, France) . 209

VOLUME 171, ISSUE 3 **15 NOVEMBER 2002**

Effect of skidder disturbance on commercial tree regeneration in logging gaps in a Bolivian tropical forest
T.S. Fredericksen and W. Pariona (Santa Cruz, Bolivia and Gainesville, FL, USA) 223
Cork weight prediction at tree level
F. Ribeiro and M. Tomé (Lisbon, Portugal) 231
Radial growth variation of Norway spruce (*Picea abies* (L.) Karst.) across latitudinal and altitudinal gradients in central and northern Europe
H. Mäkinen, P. Nöjd (Vantaa, Finland), H.-P. Kahle (Freiburg, Germany), U. Neumann (Tharandt, Germany), B. Tveite (Ås, Norway), K. Mielikäinen (Helsinki, Finland), H. Röhle (Tharandt, Germany) and H. Spiecker (Freiburg, Germany) 243
Phenological differences in tree water use and the timing of tropical forest inventories: conclusions from patterns of dry season diameter change
T.R. Baker (Aberdeen, UK), K. Affum-Baffoe (Aberdeen, UK and Kumasi, Ghana), D.F.R.P. Burslem and M.D. Swaine (Aberdeen, UK) 261
Growth and carbon stocks of a spruce forest chronosequence in central Europe
M. Mund (Jena, Germany), E. Kummetz (Bayreuth, Germany), M. Hein (Jena, Germany), G.A. Bauer (Cambridge, MA, USA) and E.-D. Schulze (Jena, Germany) 275
Spruce diameter growth in young mixed stands of Norway spruce (*Picea abies* (L.) Karst.) and birch (*Betula pendula* Roth *B. pubescens* Ehrh.)
T. Gobakken and E. Næsset (Ås, Norway) 297
Plant growth, biomass production and soil water dynamics in a shifting dune of Indian desert
G. Singh and T.R. Rathod (Jodhpur, India) 309
Effects of wood-ash on the tree growth, vegetation and substrate quality of a drained mire: a case study
M. Moilanen (Muhos, Finland), K. Silfverberg (Vantaa, Finland) and T.J. Hokkanen (Joensuu, Finland) 321

Contents of *Forest Ecology and Management*, Volume 171 339